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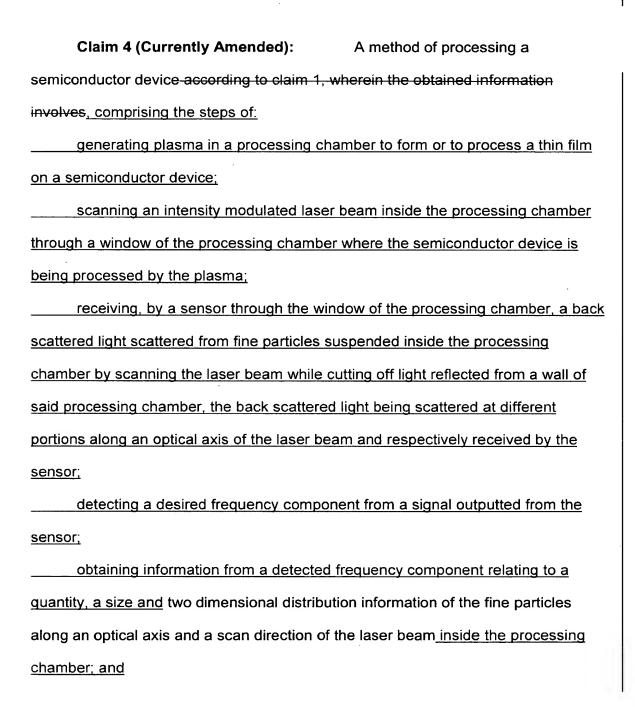
IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-2 (Canceled):

Claim 3 (Currently Amended):	A method of processing a
semiconductor device according to claim 1,	, wherein the laser beam is polarized in
P-polarization and the window, comprising the steps of:	
generating plasma in a processing c	hamber to form or to process a thin film
on a semiconductor device;	
scanning an intensity modulated P-p	polarized laser beam inside the processing
chamber through a window of the processir	ng chamber which has a Brewster's angle
relative to the P-polarized laser beam wher	e the semiconductor device is being
processed by the plasma;	
receiving, by a sensor through the w	rindow of the processing chamber, a back
scattered light scattered from fine particles	suspended inside the processing
chamber by scanning the laser beam, the b	pack scattered light being scattered at
different portions along an optical axis of th	e laser beam and respectively received
by the sensor;	·
detecting a desired frequency compo	onent from a signal outputted from the
sensor;	
obtaining information from a detecte	d frequency component relating to a
quantity, a size and a distribution of fine pa	rticles illuminated by the laser beam
inside the processing chamber; and	

outputting obtained information relating to the quantity, the size and the distribution of the fine particles.



outputting obtained information relating to the quantity, the size and the distribution of the fine particles.

Claim 5 (Canceled):

Claim 6 (Currently Amended): A method of processing a semiconductor device according to claim [[1]]4, wherein the desired frequency component for modulating the laser beam is different from a frequency for generating the plasma inside the processing chamber.

Claim 7 (Currently Amended): A method of processing a semiconductor device, comprising the steps of:

coating a resist on a surface of a substrate;

exposing the resist coated on the substrate with a desired light pattern; developing the exposed resist;

processing the substrate with plasma and the surface of the substrate is partially covered with the developed resist; and

wherein in the processing step, the substrate is processed in a processing apparatus and a laser beam is scanned inside the processing apparatus through a window of the processing apparatus and a back scattered light from fine particles by

removing the resist coated on the substrate on which patterns are formed;

being scattered at different portions along an optical axis of the laser beam and respectively detected through the window to obtain two dimensional distribution

the scanned laser beam is detected through the window, the back scattered light

information of fine particles along the optical axis and the scan direction of the laser beam inside the processing chamber.

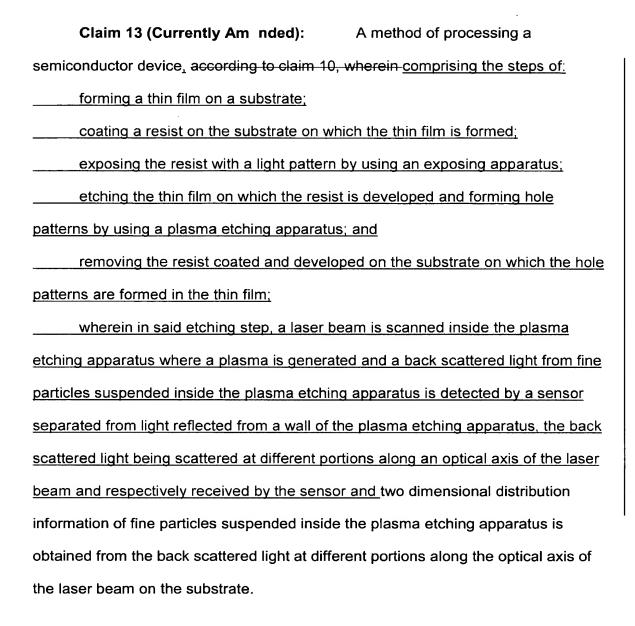
Claim 8 (Currently Amended): A method of processing a semiconductor device-according to claim 7, wherein information of distribution of fine particles suspending inside the processing apparatus is obtained from the back scattered light.

Claim 9 (Currently Amended): A method of processing a semiconductor device according to claim 7, wherein an intensity of the laser beam scanning inside the processing apparatus is modulated at a desired frequency.

Claim 10 (Canceled):

Claim 11 (Currently Amended): A method of processing a semiconductor device according to claim [[10]]13, wherein an intensity of said laser beam scanning inside said plasma etching apparatus is modulated at a desired frequency.

Claim 12 (Currently Amended): A method of processing a semiconductor device according to claim [[10]]13, wherein information regarding sizes and distribution of fine particles suspended inside said plasma etching apparatus is obtained from the back scattered light at different portions along the optical axis of the laser beam on the substrate.



Claim 14 (Currently Amended): A method of processing a semiconductor device according to claim 13, wherein the two dimensional distribution information includes a distribution of fine particles along an optical axis and a scan direction of the laser beam.

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Claim 15 (Curr ntly Amended): A method of processing a semiconductor device-according to claim 13, wherein the two dimensional distribution information regarding the distribution of fine particles is displayed on a monitor.

Claim 16 (Currently Amended): A method of processing a semiconductor device according to claim 13, wherein information regarding contamination inside the plasma etching apparatus is obtained from the back scattered light at different portions along the optical axis of the laser beam on the substrate.

Claim 17 (Currently Amended): A method of processing a semiconductor device comprising the steps of:

loading a substrate into a chamber of a plasma etching apparatus, on a surface of the substrate, a resist pattern is formed;

evacuating inside the chamber in which the substrate is loaded and supplying a process gas inside the chamber;

applying high frequency power to an electrode of the plasma etching apparatus and generating plasma inside the chamber;

processing the substrate with plasma;

illuminating a laser beam inside the chamber through a window of the plasma etching apparatus and detecting through the window a back scattered light generated by fine particles suspended inside the chamber, the back scattered light

being scattered at different portions along an optical axis of the laser beam and respectively detected through the window and obtained two dimensional distribution information of fine particles at different portions along the optical axis of the laser beam on the substrate; and

unloading the substrate from the plasma etching apparatus after stopping supply of the process gas and evacuating the process gas from inside the chamber.

Claim 18 (Currently Amended): A method of processing a semiconductor device according to claim 17, wherein an intensity of the laser beam illuminated inside the chamber is modulated at a desired frequency.

Claim 19 (Currently Amended): A method of processing a semiconductor device-according to claim 17, wherein information is obtained from the back scattered light regarding fine particles suspended inside the chamber.

Claim 20 (Currently Amended): A method of processing a semiconductor device according to claim 19, wherein obtained information regarding the fine particles is information regarding sizes and distribution of fine particles suspended inside the chamber.

Claim 21 (Currently Amended): A method of processing a semiconductor device according to claim 20, wherein said information regarding sizes and distribution of fine particles suspended inside the chamber is displayed on a monitor.

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Claim 22 (Currently Amended): A method of processing a semiconductor device according to claim 17, wherein, based on a detection signal detected from light scattered by said fine particles, information regarding contamination status inside the plasma etching apparatus is obtained.

Claim 23 (Currently Amended): A method of processing a semiconductor device according to claim 17, wherein information regarding contamination inside the plasma etching apparatus is obtained from the back scattered light.

Claim 24 (Previously Presented): A method of processing a semiconductor device, comprising:

generating plasma in a processing chamber to form a thin film on a semiconductor device or to process a thin film formed on a semiconductor device;

scanning an intensity modulated laser beam that is polarized inside the processing chamber through an observation window of the processing chamber arranged at a Brewster's angle relative to the laser beam; and

obtaining two dimensional distribution information of fine particles by respectively detecting a back scattered light from fine particles suspended inside the processing chamber at different portions along an optical axis of the laser beam on the semiconductor device.

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Claim 25 (Pr viously Presented): A method according to claim 24, wherein the two dimensional distribution information of fine particles includes a quantity, a size and a distribution of fine particles along an optical axis and a scan direction of the laser beam.